WHAT IS CLAIMED IS:

1. A method of manufacturing a photo mask comprising:

preparing mask data for a mask pattern to be formed on a mask substrate;

calculating edge moving sensitivity with respect to each of patterns included in the mask pattern using the mask data, the edge moving sensitivity corresponding to a difference between a proper exposure dose and an exposure dose to be set when a pattern edge varies;

determining a monitor portion of the mask pattern, based on the calculated edge moving sensitivity;

actually forming the mask pattern on the mask substrate;

acquiring a dimension of a pattern included in that portion of the mask pattern formed on the mask substrate which corresponds to the monitor portion;

determining evaluation value for the mask pattern formed on the mask substrate, based on the acquired dimension; and

determining whether the evaluation value satisfies predetermined conditions.

2. The method according to claim 1, wherein the evaluation value includes exposure latitude.

3. The method according to claim 1, further comprising calculating exposure latitude with respect

to each of the patterns included in the mask pattern using the mask data, and

wherein determining the monitor portion includes determining the monitor portion of the mask pattern, based on the calculated edge moving sensitivity and the calculated exposure latitude.

4. The method according to claim 1, further comprising calculating a deviation ΔCD from a proper CD value with respect to each of the patterns included in the mask pattern using the mask data, and

wherein determining the monitor portion includes determining the monitor portion of the mask pattern, based on the calculated edge moving sensitivity and the calculated deviation ΔCD.

5. The method according to claim 1, wherein a calculation position of the edge moving sensitivity corresponds to a grid position used in designing the mask data.

6. The method according to claim 1, wherein a calculation position of the edge moving sensitivity corresponds to a division point or a calculation point used in proximity correction.

7. The method according to claim 1, wherein acquiring the dimension includes:

measuring a dimension of a specified pattern included in that portion of the mask pattern formed on the mask substrate which corresponds to the monitor

portion; and

estimating a dimension of a pattern other than the specified pattern from the measured dimension of the specified pattern.

8.   The method according to claim 1, wherein the mask data is subjected to proximity correction.

9.   A method of manufacturing a semiconductor device comprising:

preparing a photo mask manufactured by the method according to claim 1; and

projecting a mask pattern of the photo mask onto a photo resist formed on a semiconductor substrate.

10.   A method of manufacturing a photo mask comprising:

preparing mask data for a mask pattern to be formed on a mask substrate;

calculating a distance from an adjacent pattern with respect to each of patterns included in the mask pattern using the mask data;

determining a monitor portion of the mask pattern, based on the calculated distance;

actually forming the mask pattern on the mask substrate;

acquiring a dimension of a pattern included in that portion of the mask pattern formed on the mask substrate which corresponds to the monitor portion;

determining evaluation value for the mask pattern

formed on the mask substrate, based on the acquired dimension; and

determining whether the evaluation value satisfies predetermined conditions.

11. The method according to claim 10, wherein the evaluation value includes exposure latitude.

12. The method according to claim 10, further comprising acquiring a design dimension with respect to each of the patterns included in the mask pattern using the mask data, and

wherein determining the monitor portion includes determining the monitor portion of the mask pattern, based on the calculated distance and the design dimension.

13. The method according to claim 10, further comprising determining a frequency distribution of the calculated distance, and

wherein determining the monitor portion includes determining the monitor portion of the mask pattern, based on the calculated distance and the frequency distribution.

14. The method according to claim 10, further comprising:

acquiring a design dimension with respect to each of the patterns included in the mask pattern using the mask data; and

determining a frequency distribution of the design

dimension, and

wherein determining the monitor portion includes determining the monitor portion of the mask pattern, based on the calculated distance and the frequency distribution.

15. The method according to claim 10, wherein the mask data is subjected to proximity correction.

16. A method of manufacturing a semiconductor device comprising:

preparing a photo mask manufactured by the method according to claim 10; and

projecting a mask pattern of the photo mask onto a photo resist formed on a semiconductor substrate.